

RF/RMRS-98-288

**Closure Description Document
for
RCRA Units 21 and 48**

Draft

U. S. Department of Energy

Rocky Flats Environmental Technology Site

November, 1998

**CLOSURE DESCRIPTION DOCUMENT
FOR RCRA UNITS 21 AND 48**

REVISION 0

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1.0 INTRODUCTION

This document describes the activities that will be completed in order to achieve clean closure of Resource Conservation and Recovery Act (RCRA) units in accordance with the closure plans contained in Part X of the Rocky Flats Environmental Technology Site (RFETS) RCRA Part B Permit (Permit Number CO-97-05-30-01) and the Closure Plan for Interim Status Units at the RFETS. Unit 21 is a permitted storage unit located in Building 788. Unit 48 is an interim unit comprising the pondcrete solidification process equipment located in the area of Building 788, which includes the clarifier tank system.

In 1997, the Department of Energy (DOE), Kaiser-Hill Company L.L.C. (K-H), and the Colorado Department of Public Health and Environment (CDPHE) entered into an Order on Consent (97-08-21-01) which required, *inter alia*, that DOE and K-H implement the 1997 Tank Management Plan (the Plan). Pursuant to the Plan, the clarifier tank system must be closed by June 30, 1999. The closure described herein will allow the Site to meet this commitment. Closure will be accomplished by one or more of the following methods: (1.) removing all waste; (2.) recycling metal as scrap metal; (3.) decontaminating all unit equipment and structures, and removing any contamination present due to operations of the unit; or (4.) cleaning material to meet debris treatment closure standards, and achieving agreed upon closure standards identified in Section 5.0.

1.1 SCOPE OF CLOSURE PROJECT

The Building 788 Cluster Decommissioning project includes Building 788, trailer T778A, the clarifier tank, and miscellaneous structures and equipment in the vicinity. All of the equipment and materials were associated with either the production and processing of pondcrete in Unit 48 or the storage of pondcrete in Unit 21.

Closure of RCRA Unit 48 entails removal of the clarifier tank, including the surrounding woodshed and ancillary equipment, such as piping, pumps, and air compressor. Only the concrete slab will remain in place. Associated equipment and structures including the pug mill, steel rack, temporary equipment for sludge transfer, and timber will be removed. Ancillary equipment on the northwest side of building 788 will also be removed.

Building 788 will be decommissioned and dismantled down to the slab. Property meeting the free release criteria will be transferred to Property Utilization and Disposal (PU&D). Radioactively contaminated metals will be recycled. Waste containers will be shipped from the building and RCRA Unit 21 will be closed. All utilities services will be

disconnected and isolated, and abandoned or interfering utility poles will be removed. The T788A support trailer will be relocated to another site location. Protruding concrete stem walls and foundations on both the north and south side of building 788 will be removed to the extent practical, and backfilled or covered with soil.

2.0 UNIT CLOSURE NOTIFICATION, CERTIFICATION AND SCHEDULE

The removal of Building 788, the clarifier tank and ancillary equipment (including the 308A pumphouse) will constitute closure of Units 21 and 48. Notification will be submitted to the Director of the Colorado Department of Public Health and Environment (CDPHE) of the intent to close the process waste system 45 days prior to the planned start of closure activities.

3.0 UNIT DESCRIPTIONS

Both Unit 21 and Unit 48 are located in the vicinity of the Solar Evaporation Ponds in the northeast corner of the Protected Area (PA) of RFETS. Pondcrete was treated in Unit 48 and stored in Unit 21.

3.1 RCRA Unit 21

Unit 21 is the pondcrete storage area with a permitted capacity of 44,000 gallons or 200 cubic yards. The building is of metal construction on a concrete slab, 225 feet in length and 20 – 25 feet wide. The boundaries of the unit are all above ground materials and structures within or nearby the footprint of the building.

3.2 RCRA Unit 48

The pondcrete solidification process, process code T04, was conducted in Unit 48. The boundary of the unit is the following equipment: the clarifier tank, pug mill, cement mixer, building 308A, and associated ancillary equipment such as pumps, valves, hoses, and piping.

4.0 CHARACTERIZATION

All portions of RCRA units 21 and 48 were used to manage listed hazardous waste. Some portions of the units may be decontaminated to meet "Clean Debris Surface Standards (40 CFR 268.45). Other material may be recycled as scrap metal, or that

which cannot be decontaminated to meet the standard will be managed as RCRA listed hazardous wastes. In-process wastes will be characterized in accordance with 6 CCR 262.11 for all COCs identified in Section 6.1 and Table 6.2

Certain EPA waste codes associated with these waste streams, if land disposed, would be subject to the treatment standards found at 40 CFR 268.48, Underlying Hazardous Waste Constituents. The following section contains a list of constituents that the generator could reasonably expect to be present.

4.1 EPA WASTE CODES ASSOCIATED WITH RCRA UNITS 21 AND 48 AND SAMPLING PARAMETERS

The following EPA Waste Codes have been associated with the use of Units 21 and 48:

D002, D003, D006, D007, D008, D009, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F006, F007, F009

After treatment, using either Option 1 or Option 3 described below, a representative sample of the final rinse water will be taken. This sample will be tested for:

- the target analyte list (TAL) for metals (Table 6-1);
- volatile organics (as identified in Table 6-2);
- fingerprinting (pH, flash point, TSS, turbidity, etc.); and
- cyanide.

These sampling parameters account for all of the EPA waste codes associated with RCRA Units 21 and 48. Tables 4-1 and 4-2 list the contaminants to be analyzed for, and their associated EPA Waste Codes. If the rinsate or debris treatment standards, identified in Options 1 and 3 are not met, the waste from these units will be managed as mixed waste.

Table 4-1 Associated EPA Waste Codes And Contaminants Of Concern

| EPA Waste Code | Associated Contaminants of Concern | Section 268.40 | | Tier I Standard mg/L |
|---------------------------------|---------------------------------------|----------------|-----------------------|----------------------|
| | | Waste Water | Non-Waste water (LDR) | |
| D002 | Corrosive | (a) | (a) | |
| D003 | Reactive | (a) | (a) | |
| D006 | Cadmium | 0.69 mg/L | 0.11 mg/Kg | 0.5 |
| D007 | Chromium | 2.77 mg/L | 0.60 mg/ Kg | 10.0 |
| D008 | Lead | 0.69 mg/L | 0.75 mg/ Kg | (b) |
| D009 | Mercury | 0.15 mg/L | 0.025 mg/ Kg | 0.2 |
| D018 | Benzene | 0.14 mg/L | 10.0 mg/ Kg | 0.5 |
| D019 | Carbon Tetrachloride | 0.057 mg/L | 6.0 mg/ Kg | 0.5 |
| D028 | 1,2 Dichloroethane | 0.21 mg/L | 6.0 mg/ Kg | 0.5 |
| D029 | 1,1 Dichloroethylene | 0.025 mg/L | 6.0 mg/ Kg | 0.7 |
| D035 | Methyl ethyl Ketone | 0.28 mg/L | 36.0 mg/ Kg | (b) |
| D038 | Pyridine | 0.014 mg/L | 16.0 mg/ Kg | (b) |
| D040 | Trichloroethylene | 0.054 mg/L | 6.0 mg/ Kg | 0.5 |
| D043 | Vinyl Chloride | 0.27 mg/L | 6.0 mg/ Kg | 0.2 |
| | | | | |
| F001, F002, F003, F005 | 1,1,1 Trichloroethane | 0.54 mg/L | 6.0 mg/ Kg | 20 |
| | 1,1,2 trichloro-1,2,2 trifluoroethane | 0.057 mg/L | 30.0 mg/ Kg | (b) |
| | 1,1,2 trichloroethane | 0.054 mg/L | 6.0 mg/ Kg | 0.5 |
| | Acetone | 0.28 mg/L | 160 mg/ Kg | 365 |
| | Benzene | 0.14 mg/L | 10 mg/ Kg | 0.5 |
| | Carbon disulfide | 3.8 mg/L | N/A | 2.76 |
| | Carbon Tetrachloride | 0.057 mg/L | 6.0 mg/ Kg | 0.5 |
| | Chlorobenzene | 0.057 mg/L | 6.0 mg/ Kg | 10 |
| | Cyclohexanone | 0.36 mg/L | N/A | (b) |
| | Ethyl acetate | 0.34 mg/L | 33 mg/ Kg | (b) |
| | Ethyl benzene | 0.57 mg/L | 10 mg/ Kg | 70 |
| | Ethyl ether | 0.12 mg/L | 160 mg/ Kg | (b) |
| | Isobutanol | 5.6 mg/L | 170 mg/ Kg | (b) |
| | Methanol | 5.6 mg/L | N/A | (b) |
| | Methyl ethyl ketone | 0.28 mg/L | 36 mg/ Kg | (b) |

| EPA Waste Code | Associated Contaminants of Concern | Section 268.40 | | Tier I Standard Mg/L |
|---------------------------------|------------------------------------|----------------|-----------------------|----------------------|
| | | Waste Water | Non-Waste water (LDR) | |
| F001, F002, F003, F005 | Methyl isobutyl ketone | 0.14 mg/L | 33 mg/ Kg | (b) |
| | Methylene chloride | 0.089 mg/L | 30 mg/ Kg | 0.5 |
| | n-butyl alcohol | 5.6 mg/L | 2.6 mg/ Kg | (b) |
| | o-dichlorobenzene | 0.088 mg/L | 6.0 mg/ Kg | 60 |
| | Pyridine | 0.014 mg/L | 16 mg/ Kg | (b) |
| | Tetrachloroethylene | 0.056 mg/L | 6.0 mg/ Kg | 0.5 |
| | Toluene | 0.080 mg/L | 10 mg/ Kg | 100 |
| | Trichloroethylene | 0.054 mg/L | 6.0 mg/ Kg | 0.5 |
| | Trichlorofluoromethane | 0.020 mg/L | 30 mg/ Kg | 0.5 |
| | Xylene | 0.32 mg/L | 30 mg/ Kg | 1000 |
| F006, F007 F009 | Cadmium | 0.69 mg/L | 0.11 mg/ Kg | 0.5 |
| | Chromium | 2.77 mg/L | 0.60 mg/ Kg | 10 |
| | Cyanide, Total | 1.2 mg/L | 590 mg/ Kg | 20 |
| | Cyanide, amenable | 0.86 mg/L | 30 mg/ Kg | (b) |
| | Lead | 0.69 mg/L | 0.75 mg/ Kg | (b) |
| | Nickel | 3.98 mg/L | 11 mg/ Kg | 10 |
| | Silver | NA | 0.14 mg/ Kg | 18.3 |

(a) No numeric standards established

(b) No Maximum Contaminant Level (MCL) or Programmatic Preliminary Remediation Goal (PPRG) levels established

Table 4-2 UNDERLYING HAZARDOUS CONSTITUENTS

| Underlying Hazardous Constituent | Section 268.48 | |
|---------------------------------------|----------------|-----------------------|
| | Waste Water | Non-Waste water (LDR) |
| Barium | 1.2 mg/L | 21 mg/ Kg |
| Beryllium | 0.82 mg/L | 1.22 mg/ Kg |
| Cyanide, Total | 1.2 mg/L | 590 mg/ Kg |
| Cyanide, Amenable | 0.86 mg/L | 30 mg/ Kg |
| 1,1,2 Trichloro 1,2,2 Trifluoroethane | 0.057 mg/L | 30 mg/ Kg |
| Tetrachloroethylene | 0.057mg/L | 6.0 mg/ Kg |

5.0 CLOSURE PERFORMANCE STANDARD

For all constituents of concern, the closure standard will be 100 times the Maximum Contaminant Level (MCL) for that contaminant. In order to achieve RCRA closure

performance standards, Units 21 and 48 will be removed completely to the concrete slab, thereby eliminating further maintenance and potential releases of hazardous waste to the environment. Management options are described below.

5.1 OPTION 1: DECONTAMINATION OF MATERIAL FROM RCRA UNITS 21 AND 48

RINSATE STANDARD: If this option is selected for all or part of the materials from these units, closure will consist of decontaminating tanks, pipes and ancillary equipment with a solution capable of removing the contaminants of concern and testing the final rinsate to verify the closure performance standard is met. This decontamination will be conducted in accordance with the Rocky Flats Environmental Technology Site RCRA Permit, Part 10 Closure, Section C, Clean Closure by Decontamination.

5.1.1 Closure Activities For Material Associated with RCRA Units 21 and 48

Closure activities for decontamination identified in this section include, but are not limited to the following:

1. Water containing sodium carbonate and trisodium phosphate will be used as the decontamination solution. Selection of the decontamination solution will be based on the types of wastes previously managed in the unit and the contaminants present.
2. Surfaces will be washed, and piping and containers will be flushed with a decontamination solution to remove remaining trace amounts of acids or bases.
3. The final rinsate closure performance standards for internal surfaces of tanks, piping and ancillary equipment (as described in RFCA Permit, Part X Closures) will be used to evaluate the effectiveness of the decontamination;
4. The final rinsate volume will not exceed 5% of the capacity of the system and the pH of the rinsate shall be between 6 and 9.
5. The RCRA closure standard will be 100 X MCL.
6. Wastes containing volatile and semi-volatile organics associated with listed wastes which are at or below MCLs will not be considered listed wastes and will be managed as low level waste.

5.1.2 Material Disposition

Material successfully decontaminated under this option will be either managed as LLW

or as scrap metal as defined at 6 CCR 1007-3, Part 261.6 (a)(3)(iii).

5.2 OPTION 2: MANAGED AS HAZARDOUS WASTE WITH NO ON-SITE TREATMENT

5.2.1 Manage Material That Can be Removed as Hazardous Waste

If this option is selected, removable system components will be managed as RCRA mixed waste. The material will be removed, size reduced, where feasible, and placed into permitted storage on-site until it is shipped to an off-site treatment, storage or disposal facility. Hazardous waste and/or mixed wastes generated from this project will be managed in accordance with applicable state and federal regulations. Other waste management activities are described in Section 7.

In accordance with 40 CFR 268, a representative sample will be taken of these waste streams to determine whether the waste stream meets land disposal restrictions (LDR) standards. If the toxic characteristic leachate procedure (TCLP) sample meets the MCL standards for organics (which contain all the listed wastes identified for this unit), the waste will be managed as non-hazardous LLW.

5.3 OPTION 3: DEBRIS TREATMENT OF MATERIAL FROM RCRA UNITS 21 AND 48

If this option is selected for material from RCRA Units 21 and 48, the material will be managed as RCRA hazardous debris in accordance with 40 CFR 268.45. This option probably will be selected for only small amounts, if any, of material removed from the units.

5.3.1 Debris Treatment Closure Performance Standards

Hazardous debris will be considered decontaminated if the following are met:

1. The material is debris as defined in 40 CFR 268.45.
2. A technology as specified in 40 CFR 268.45 is selected. Extraction or destruction technologies will be selected over immobilization technologies whenever possible. Hazardous debris in Building 788 will be decontaminated using water washing and spraying. Water containing sodium carbonate and trisodium phosphate will be used as the decontamination solution.
3. A volume of water to ensure adequate residence time rinsing is used.

4. The debris surface is clean as defined by 40 CFR 268.45.

All treatment residuals including rinsates generated from extraction and/or destruction technologies used in closing Building 788 will be characterized and managed accordingly. If the debris closure performance standards are not met, the material will be removed and managed as RCRA mixed waste.

5.4 OPTION 4: SCRAP METAL FROM RCRA UNITS 21 AND 48

The metal from the building will be managed as LLW and is exempted from RCRA as scrap metal. The clarifier, piping, and ancillary equipment will be recycled as RCRA scrap metal provided the loose residues and sludge are removed from the scrap metal prior to packaging and shipment. The residues will be managed as RCRA hazardous waste and applicable waste codes will attach.

6.0 SPECIFIC CLOSURE ACTIVITIES

Specific closure activities are described in the Project Execution Plan and the Integrated Work Control Package for this project. Closure activities will be implemented to minimize waste and to ensure the protection of human health and the environment. The current Spill Prevention, Control and Countermeasures (SPCC) Plan, developed in accordance with the RFETS National Pollutant Discharge Elimination System (NPDES) permit requirements will apply to closure activities.

6.1 UNIT CLOSURE ACTIVITIES

6.1.1 Closure of System Components

Units 21 and 48 will be closed by removing materials associated with the permitted units. The material will be disposed or reused. Waste disposition is described in Section 7.0.

6.1.2 Closure of Concrete Slabs

The remaining slab will be closed either by documenting that no spills of hazardous waste have occurred, or that past spills were properly cleaned up, or by scrubbing the slab. Records relating to spills within the building will be reviewed. If the records show no hazardous waste has been spilled in the building or documented spills were

properly cleaned up, that information will be documented, and no further action will be taken. The slab, thus, will be closed.

If the record does not support closure, the slab will be scrubbed with a machine capable of carrying cleaning solutions and providing brushing action on the floor surface. After scrubbing, the solution will be tested for rinsates. If the rinsate meets or is less than 100 X MCL, the slab shall be considered closed.

If the performance standard cannot be met, the unit will be deferred to environmental restoration.

6.1.3 Soil Remediation

Soil remediation is not within the scope of this Closure Description Document. Any soil contamination discovered during the closure of these units will be deferred to environmental restoration for future evaluation. CDPHE will be notified of any soil contamination found during closure activities.

7.0 DISPOSITION OF WASTE GENERATED DURING CLOSURE

Closure activities may generate a combination of radioactive, hazardous, and mixed wastes. Contaminated metals, clarifier, pipeline, sumps and ancillary equipment are expected to be the major sources of waste. Plastic, tools, personal protective equipment (PPE) and other materials associated with closure will also be a source of waste. Unless hazardous waste comes into direct contact with the surface of the PPE, PPE will be managed as LLW. Waste will be handled by qualified waste packaging technicians, who will work with decontamination specialists and radiation control technicians to identify and segregate the hazardous/LLM or LLW. Waste packaging technicians will package and label the waste, and will arrange for radioactive waste to be certified. Liquid hazardous or radioactive waste generated after the process waste lines are no longer in service will be collected in drums and shipped to Building 374 for processing. Solid waste in drums or boxes will be managed appropriately.

7.1 ESTIMATE OF WASTE VOLUMES TO BE GENERATED

Table 7-1 describes the removal activities in each of the major areas of Units 21 and 48, the nature and approximate volume of waste that will be generated, and the anticipated categorization of the waste types.

In general, waste disposition will be by one of the following methods, depending on waste type:

Reusable items will go to PU&D after contamination surveys are conducted.

Free Release Disposal – solid wastes will be sent to an off-site disposal facility (e.g. USA Waste) after contamination surveys.

Free Release Recycle – metal waste found to be free of radioactive contamination will be sent off-site for recycling.

Low level or mixed recycle – low level radioactive or low level mixed metal waste will be sent to an approved facility for remelting and recycling.

Low Level Disposal – low level waste that cannot be recycled will be packaged and shipped to an approved off-site disposal (e.g. Nevada Test Site).

Low Level Mixed Disposal – mixed waste that cannot be recycled or treated to remove hazardous constituents will be packaged and shipped to an approved off-site facility (e.g. Envirocare).

Table 7 -1 Summary Of Project Activities And Estimated Waste Generation

| Project Component | Estimated Waste Volume | Waste Type (a) |
|--|---|----------------|
| • Clarifier and Building 788 | | |
| B788 interior surfaces will be decontaminated as necessary, the building will be dismantled, and the concrete slab will remain in place. | Building Metal 100 cu. Yds. Wash water - 2-5,000 gallons | RM LLM |
| Clarifier Tank, and woodshed will be dismantled. | Clarifier metal Wood 8.0 cu. Yds. | LLW |
| Trailer 788A - The wooden porch attached to the east wall of the trailer will be dismantled. The 50-KVA, 450-volt transformer attached to the north side of the trailer will be disconnected and removed. | Wood 3.0 cu. Yds. transformer | LLW |
| The process piping inside B788, around the B788 Complex, and between the Clarifier Tank and Building 788 will be removed. | Process piping 2.0 cu. Yds. | RM, LLW |
| All electrical services to B788, T788A, Clarifier, pug mill and other equipment will be disconnected. Wiring will be de-terminated at the power source. All wire will be left inside conduits as found. Conduits will be removed to a practical location with the remaining conduits abandoned in place and labeled. | Conduits and wiring 2.0 cu. Yds. | RM, LLW |
| The two power poles at the southwest corner of B788 may have to be removed; if removed power poles will | Power poles 4.0 cu. Yds. | LLW |

| Project Component | Estimated Waste Volume | Waste Type (a) |
|--|---|----------------|
| be cut off at grade. | | |
| The equipment and structures on the southeast side of B788 will be demolished and removed. This includes the pug mill, steel rack, temporary equipment for sludge transfer, forklift, and the concrete/timber ramp. The flexible hose running from the clarifier to the loading station will be removed. | Equipment 25 cu. Yds. Concrete 2.0 cu. Yds. Wood 6.0 cu. Yds. Flexible hose 4.0 cu. Yds. | RM, LLM |
| The protruding concrete stem walls and foundations on the north side of B788 and concrete foundations around B788 (south side) will be removed to the extent practical to facilitate filling and grading the area with soil. | Concrete 4.0 cu. Yds. | LLW |
| The jersey barriers on the south access road to Building 788 will be relocated to PU&D, and the bollards will be removed at grade. | | Reuse |
| | | |
| • Pond Debris Cleanup - 207A Pond | | |
| Approximately 500 feet of flexible hose from the pond and banks. | Flexible hose 12.0 cu. Yds. | LLM |
| Motor control center rack on the west bank southeast of B788. | Electrical equipment 3.0 cu. Yds. | LLW |
| Pallets stacked on the basin floor at the southwest corner. | Wood 5.0 cu. Yds. | LLW |
| The transfer pipe from the 308A pump house at the northeast corner of the pond will be cut flush with the liner and capped. | Piping 2.0 cu. Yds. | LLM |
| Steel trough from the woodshed around the clarifier to the bottom of the west bank. | Trough metal 1.0 cu. Yds. | RM |
| Pipe box north of Pond 207A will be removed and the pipes capped at grade. | Piping 0.25 cu. Yds. | RM |
| Miscellaneous wood and material from the pond perimeter. | Wood 4.0 cu. Yds. | LLW |
| Metal fence posts south of the 207A Pond. | Metal 1.0 cu. Yds. | RM |
| Valve box and pipeline that runs from the pond to Building 910. | Piping 10.0 cu. Yds. | RM |
| | | |
| • 207B Ponds | | |
| Five pumps from the road between Ponds 207A and B. These pumps are portable gasoline engine driven units. | Metal 4.0 cu. Yds. | RM |

| Project Component | Estimated Waste Volume | Waste Type (a) |
|---|--|----------------|
| Five electrical control stations and associated disconnects and racks will be removed to the foundation level. | Electrical equipment 3.0cu. Yds. | RM |
| Heater unit and associated equipment. The foundation will remain. | 2.0 cu. Yds. | RM |
| Four sets of wooden stairs from the pond banks. | Wood 1.0 cu. Yds. | LLW |
| Old transfer piping from the interceptor trench to the North Pond. | Piping 12.0 cu. Yds. | RM |
| Valve stands and risers between the 207B Ponds will be cut and capped. | Piping and accessories 1.0 cu. Yds. | RM |
| Transfer piping from the 207B North Pond to the 308A Pump House will be cut and capped at grade. The remaining piping will be removed. | Piping 1.0 cu. Yds. | RM |
| Branch pipe from ITS line near Building 910 that runs to the South Pond will be removed and capped. | Piping 4.0 cu. Yds. | RM |
| The grating on the two access ramps on the access road west of the 207B Ponds will be removed. The concrete ramps will remain in place. | Metal 3.0 cu. Yds. | RM |
| 308A Pump House will be removed to the foundation. | Wood 5.0 cu. Yds. | LLW |
| Power poles between 207B Ponds from B910 to the 308A Pump House will be cut off at grade. | Power poles 6.0 cu. Yds. | LLW |
| The scrap pipe and waste boxes (3) east of the 207B Middle Pond will be packaged and removed. | Piping 2.0 cu. Yds. Wood 2.0 cu. Yds. | RM LLW |
| Wooden stairs northwest of the 308A Pump House. | Wood 2.0 cu. Yds. | LLW |
| Access stairs to the heater unit. | Wood 1.0 cu. Yds. | LLW |
| • 207C Pond | | |
| Hotsy unit on the northeast bank. | 1.0 cu. Yds. | RM |
| Access stairs (2) on the west bank. | Wood 4.0 cu. Yds. | LLW |
| Miscellaneous tools, ladder, electrical cords, pallets, nylon ropes, dolly carts (2), rakes, squeegees, and other similar materials will be packaged and removed from the pond banks. | Equipment 5.0 cu. Yds. | LLW |
| Approximately 12 to 15 timbers used for holding plastic covering for equipment. | Wood 3.0 cu. Yds. | LLW |
| Plastic and netting from equipment covers. | Plastic 6.0 cu. Yds. | LLW |
| Equipment attachments used for scraping pond sludge and milling salt deposits. The equipment includes a mill attachment, plow, sweeper, and a backing plate for attachments. | Metal 5.0 cu. Yds. | RM |
| Approximately 1000 feet of various hoses and fittings. | Hose 12.0 cu. Yds. | LLW |
| Approximately 300 feet of aluminum and rubber sludge transfer hose. | Hose 4.0 cu. Yds. | LLW |

| Project Component | Estimated Waste Volume | Waste Type (a) |
|--|------------------------|----------------|
| Miscellaneous wooden boxes and crates. | Wood 6.0 cu. Yds. | LLW |

(a) LLW = Low Level Waste LLM = Low Level Mixed Waste RM = Recyclable Metal
Reuse = Disposition to PU&D

7.2 SUMMARY OF ESTIMATED WASTE VOLUMES AND PROPOSED DISPOSITION

Table 7-2 summarizes the estimated quantities of each type of waste that may be generated, and the disposition of that waste.

Table 7-2 Estimated Volume of Waste to be Generated if Options are Successful

| Waste Forms | Waste Type | Disposition of Waste | Estimated Quantity |
|---|-----------------------|---|--------------------|
| <u>Option 1 Decontamination</u> | | | |
| Process waste pipelines/ancillary equipment | Low Level | LLW will be recycled at GTS Duratek, Oak Ridge, TN or sent to the Nevada Test Site. | 185 cu. Yds. |
| Rinsate | Low Level Mixed | Building 374, WWTU | 2 -10,000 gal. |
| Plastic, paper, etc. | Low Level | Nevada Test Site | 115 cu. Yds. |
| <u>Option 2 Handle as Hazardous Waste</u> | | | |
| Process Waste Pipeline/ancillary equipment | Low Level Mixed Waste | Approved TSDF | 185 cu. Yds. |
| Rinsate | Low Level Mixed Waste | Building 374, WWTU | < 10,000 gals. |
| Plastic, paper, etc. that comes in direct contact with listed waste | Low Level Mixed Waste | Approved TSDF | 70 cu. Yds. |
| Plastic, wood and other material not in contact with listed waste | Low Level Waste | Nevada Test Site | 38 cu. Yds. |

| Waste Forms | Waste Type | Disposition of Waste | Estimated Quantity |
|--|--------------------------|---|--------------------|
| <u>Option 3</u> <u>Debris Treatment</u> Process waste pipelines/ancillary equipment | Low Level Waste | LLW will be recycled at GTS Duratek, Oak Ridge, TN or sent to the Nevada Test Site. | <50 cu. Yds. |
| Plastic, paper, etc. coming in to direct contact | Low Level Mixed Waste | Mixed Waste will be stored on-site in a TSDF awaiting shipment to Envirocare or another approved TSDF. | < 10 cu. Yds. |
| <u>Option 4</u> <u>Scrap Metal</u> | | | |
| Structural metal | Low Level Waste | LLW will be recycled at GTS Duratek, Oak Ridge, TN | < 100 cu. Yds. |

8.0 RECORD KEEPING

The following closure documentation will be maintained as part of the Administrative Record:

- this Closure Description Document;
- a field logbook indicating the date, number, and type of sampling activities;
- analytical results;
- records of actions taken to decontaminate equipment or structures;
- work control packages developed governing closure activities; and
- documentation that closure was conducted in accordance with the closure plan.